Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-8 (canceled)

Claim 9 (new). A voltage regulator comprising:

- an output terminal operably connected to provide an output voltage to a load,

- an output capacitor connected to the output terminal, the output capacitor having an equivalent series resistance,

- a converter circuit having supply voltage terminals for the application of a supply voltage, an output coupled to the output terminal, a feedback signal input coupled to receive a feedback signal that is representative of the output voltage, a reference signal input coupled to receive a reference signal, and a control input operable to receive a control signal,

wherein the converter unit is configured to provide an output current having a mean value that is proportional to a difference between the reference signal and the feedback signal, the proportionality between the difference and the output current mean value being adjustable dependent upon the control signal.

Claim 10 (new). The voltage regulator as claimed in claim 9, wherein the control signal corresponds to the equivalent series resistance of the output capacitor.

Claim 11 (new). The voltage regulator as claimed in claim 10, wherein the control signal causes the proportionality to be proportional to the reciprocal of the equivalent series resistance of the output capacitor.

Claim 12 (new). The voltage regulator as claimed in claim 9 further comprising a comparator unit configured to generate a differential signal from the reference signal and the feedback signal, and wherein the converter unit is configured to provide the output current based at least in part on the differential signal.

Claim 13 (new). The voltage regulator as claimed in claim 12, wherein the converter unit further comprises:

- a switching converter having an inductance and a switching unit providing clocked connection of the inductance to the supply voltage in accordance with a pulse-width-modulated signal,

- a pulse width modulator configured to generate the pulse-width-modulated signal responsive to a regulation signal, the regulation signal being dependent on the differential signal.

Claim 14. (new) The voltage regulator as claimed in claim 13, wherein the regulation signal is dependent on the differential signal and a further signal, the further signal dependent on the output current.

Claim 15 (new). The voltage regulator as claimed in claim 14, wherein the regulation signal is dependent on a difference between the differential signal and the further signal.

Claim 16 (new). The voltage regulator as claimed in claim 13, wherein the pulse width modulator further comprises a comparator unit having switching hysteresis, the comparator unit operably coupled to receive the regulation signal, the comparator unit operable to configure the pulse-width-modulated signal dependent upon a comparison of the regulation signal with a first and second threshold value.

Claim 17 (new). The voltage regulator as claimed in claim 12 wherein the comparator unit includes the control input, and wherein the comparator unit is operable to set a gain factor based on the control signal.

Claim 18 (new). A voltage regulator comprising:

- an output terminal operably connected to provide an output voltage to a load,

- an output capacitor connected to the output terminal, the output capacitor having an equivalent series resistance (ESR),

- a converter circuit having

supply voltage terminals for the application of a supply voltage,

an output coupled to the output terminal, a feedback signal input coupled to receive a feedback signal that is representative of the output voltage,

a reference signal input coupled to receive a reference signal,

a comparator unit configured to generate a differential signal from the reference signal and the feedback signal, the comparator including a control input operable to receive a control signal, the comparator having a gain factor dependent on the control signal,

a switching converter having an inductance and a switching unit providing clocked connection of the inductance to the supply voltage in accordance with a pulse-width-modulated signal,

a pulse width modulator configured to generate the pulse-width-modulated signal responsive to a regulation signal, the regulation signal being dependent on the differential signal.

Claim 19 (new). The voltage regulator as claimed in claim 9, wherein the control signal is configured to correspond to the equivalent series resistance of the output capacitor.

Claim 20 (new). The voltage regulator as claimed in claim 19, wherein the control signal is configured to cause the output current to have a mean value that is proportional to a difference between the reference signal and the feedback signal.

Claim 21 (new). The voltage regulator as claimed in claim 20, wherein the control signal is configured to cause the output current to have a mean value that is proportional to the reciprocal of the equivalent series resistance of the output capacitor.

Claim 22. (new) The voltage regulator as claimed in claim 19, wherein the regulation signal is dependent on the differential signal and a further signal, the further signal dependent on the output current.

Claim 23 (new). The voltage regulator as claimed in claim 22, wherein the regulation signal is dependent on a difference between the differential signal and the further signal.

Claim 24 (new). The voltage regulator as claimed in claim 19, wherein the pulse width modulator further comprises a comparator unit having switching hysteresis, the comparator unit operably coupled to receive the regulation signal, the comparator unit

operable to configure the pulse-width-modulated signal dependent upon a comparison of the regulation signal with a first and second threshold value.

Claim 25 (new). A method comprising:

providing a converter circuit having supply voltage terminals for the application of a supply voltage, an output coupled to an output terminal, a feedback signal input coupled to receive a feedback signal that is representative of the output voltage, a reference signal input coupled to receive a reference signal, and a control input operable to receive a control signal,

providing an output capacitor connected to the output terminal, the output capacitor having an equivalent series resistance,

employing the converter unit to generate an output current having a mean value that is proportional to a difference between the reference signal and the feedback signal, and

adjusting the proportionality between the difference and the output current mean value dependent upon the control signal.

Claim 26 (new). The method of claim 25, further comprising:

providing the control signal such that the control signal corresponds to the equivalent series resistance of the output capacitor.

Claim 27 (new). The method of claim 25, further comprising generating a differential signal from the reference signal and the feedback signal, and wherein the converter unit is configured to provide the output current based at least in part on the differential signal.

Claim 28 (new). The method of claim 25, wherein generating the differential signal further comprises generating the differential signal based in part on the control signal.